MISSISSIPPI CANYON 252

ASSESSMENT PLAN: EVALUATION OF OILED BIRD PHOTOGRAPHS COLLECTED DURING PELAGIC BIRD SURVEYS (BIRD STUDY #6) IN THE GULF OF MEXICO AND ESTIMATION OF PELAGAIC BIRD DENSITY

Approval of this *Evaluation of Oiled Bird Photographs Assessment Plan* is for the purposes of obtaining data for the Natural Resource Damage Assessment. Each party reserves its right to produce its own independent interpretation and analysis of any data collected pursuant to this work plan.

This plan will be implemented consistent with existing trustee regulations and policies. All applicable state and federal permits must be obtained prior to conducting work.

The trustees have developed a preliminary conceptual model of the DWH release, potential pathways and routes of exposure, and potential receptors. This preliminary model has informed the trustees' decision to pursue the studies outlined in the work plan.

Kevin D. Reynolds
Department of the Interior Trustee Representative

5/8/2013
Date

Louisiana Trustee Representative

5/16/2013
Date

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I. INTRODUCTION

One component of the ongoing *Deepwater Horizon/Mississippi Canyon 252* Oil Spill Natural Resource Damage Assessment (NRDA) was pelagic bird surveys and observations (*Preassessment Plan: Estimating Oiling Rates Among Pelagic Birds Using Ship Based Surveys* (Bird Study #6)) ("Preassessment Plan"). The Preassessment study encompassed real-time visual observations and photographic documentation of pelagic birds taken during ship based surveys from June 2010 through June 2011. Digital photographs allow photography analysts to 1) digitally zoom in for greater detail compared to field conditions; and 2) additional time for a more thorough assessment. A preliminary evaluation of Bird Study #6 survey photographs indicate a potentially higher rate of oiling in pelagic birds compared to the oiling rate calculated using the real-time visual observations exclusively.

This *Assessment Plan: Evaluation of Oiled Bird Photographs Collected During Pelagic Bird Surveys in the Gulf of Mexico* ("Plan") provides for comprehensive evaluation of the digital photographs of birds taken during the ship based surveys. This data will be analyzed and used to estimate the population sizes of Gulf pelagic seabirds potentially exposed to *Deepwater Horizon* oil and to reduce uncertainty in the real-time visual oiling rate data collected during the *Preassessment Plan: Estimating Oiling Rates Among Pelagic Birds Using Ship Based Surveys* (Bird Study #6).

II. OBJECTIVES

The objectives of this Plan are to:

1) Conduct comprehensive analyses of 900 digital photographs collected during the Preassessment NRDA field activities for Bird Study #6 and enter all associated oiling rate and population density data into the DOI DWH NRDA database.

2) Estimate the number of pelagic birds in the Gulf of Mexico exposed to *Deepwater Horizon* oil using robust statistical analyses.

Objective 1: Photographic analysis of the numbers of Gulf pelagic seabirds potentially exposed to oil from the *Deepwater Horizon* spill

Those photographs that were collected from *Preassessment Plan: Estimating Oiling Rates Among Pelagic Birds Using Ship Based Surveys* (Bird Study #6) will be used to derive a total number of individual seabirds that were contaminated by oil from the *Deepwater Horizon* Oil Spill in the open waters of the Gulf of Mexico during 2010 and 2011.

Objective 2: Statistical estimation of population sizes of Gulf pelagic seabirds exposed to the *Deepwater Horizon* Oil Spill

Data that was collected from Preassessment Plan will be used to derive a total number of individual seabirds present at and potentially exposed to the *Deepwater Horizon* Oil Spill in the open waters of the Gulf of Mexico during 2010 and 2011. This total figure will be derived using appropriate statistical analyses of data, not just photographs, collected during the Preassessment Plan field activities. The final product of this objective will be a table of numbers for the various seabird species and for a defined area (or areas) in the Gulf of Mexico at risk of oil exposure.

III. BUDGET

The estimated costs for this activity are $71,451.78. The Parties acknowledge that this budget is an estimate, and that actual costs may prove to be higher.